

t16_robbins3

(TMYo2bTNTgidEuSn8KYVnnNpMuK4jAdbPGA)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $g2_lattices : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u2_lattices : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k5_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k2_zfmisc_1 \\ & X0 X0) X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0) X0)))) \Rightarrow (\forall X2. \forall X3. (g2_lattices X0 X1 = g2_lattices \\ & X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (l2_lattices X0) \Rightarrow ((v1_funct_1 (u2_lattices X0)) \wedge \\ & ((v1_funct_2 (u2_lattices X0) (k2_zfmisc_1 (u1_struct_0 X0) (\\ & u1_struct_0 X0)) (u1_struct_0 X0)) \wedge (m1_subset_1 (u2_lattices \\ & X0) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (\\ & u1_struct_0 X0)) (u1_struct_0 X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l2_lattices X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (k1_lattices X0 X1 X2 = k5_binop_1 (u1_struct_0 \\ & X0) (u2_lattices X0) X1 X2))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l2_lattices X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge (l2_lattices X1)) \Rightarrow ((g2_lattices (u1_struct_0 \\ & X0) (u2_lattices X0) = g2_lattices (u1_struct_0 X1) (u2_lattices \\ & X1)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 \\ & (u1_struct_0 X1)) \Rightarrow (\forall X5. (m1_subset_1 X5 (u1_struct_0 X1)) \Rightarrow \\ & (((X2 = X4) \wedge (X3 = X5)) \Rightarrow (k1_lattices X0 X2 X3 = k1_lattices X1 X4 X5)))))))) \end{aligned}$$